

RELEVANT INFORMATION AS A TOOL OF MANAGERIAL ACCOUNTING RESEARCH IN COMPANIES OF THE POLOG REGION

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Abstract

In the rapid changes of the business environment companies have to improve permanently their performance to successfully face the increasing challenges and competition in national and international markets. Managerial Accounting as an integral part of the information system of the company has increasing impact in the decision process. Costs and revenues as relevant information produced by Managerial Accounting are of great importance for adopting managerial decisions. Costs and revenues that do not affect decisions are treated as irrelevant information, and are not taken into consideration in the decision process. Managerial decisions have a significant implication on performance and profitability of the company, the profits or negative financial results are a direct reflection of the quality of managerial decisions.

As will be noted throughout the paper, the research shows that in the case of analyzed companies (54) in the Polog region, the level of implementation of the concepts and tools of Managerial Accounting depends on: the size of the company, human resources, the value of assets and equity, the value of debts, the type of activity of the companies, the attractiveness of business environment and the cooperation of the businesses with education sector.

Results from the survey show that principles of managerial accounting as a subsystem of the larger information system are partially applied by companies in the Polog region. According to the specific findings of the paper, the implementation of Relevant Information is in direct relation to the size of the companies (micro and small companies over 90%), lack of human resources (80% of companies do not have professional staff) and the activities of companies by sectors, where 95% are trade and services and only 5% are in the manufacturing.

The research reveals that companies of Polog region should cooperate intensively with institutions of research and economic education in order to ensure quality human resources as a prerequisite of effective implementation of advanced techniques of Managerial Accounting. The findings of the author of this study are consistent with findings of international and national researchers.

Key words: *Managerial Accounting, relevant information, decision making process, relevant revenues and relevant costs, company management*

JEL: *M41, M48*

I. INTRODUCTION

The rapid changing of business environment recently into global, competitive and turbulence business environment give significant impact to how people do their business in any type of corporation, either manufacturing or non-manufacturing company, either big, medium or small company and either profit oriented or non-profit company. In today's rapid changes, every organization must continuously ensure its sustainability in global market.

Companies must be able to compete nationally and internationally in order to sustain in the market. Managerial Accounting practices have to assure that information provided to managers is relevant and useful in doing their jobs (Sunarny 2013).

Accounting is an information system that provides the necessary information for management in the decision making process. Managers permanently face numerous challenging situations in the decision making process regarding the quantity and quality of production, the prices of products and services, the level of wages of the employees and the level of indirect costs (Zimmerman, 2000).

Decisions approved by managers' today impact not only profit of this year but also potentially the profit of the upcoming years. As a result of this, the impact of short-term decisions is very important as an integral part of long-term decision process.

Managers in the process of adopting the business decisions are facing many questions and dilemmas. The short-term decision-making process considerably is facilitated if managers assisted by financiers and accountants apply the concept of Relevant Information.

Implementation of the Relevant Information regarding costs and revenues must respect the following two basic criteria (Smith, *et al*, 2006):

1. Must be linked to the future,
2. Must be different for each of the alternatives being considered.

Information that do not meet the above two criteria are considered as irrelevant information and therefore are not relevant in terms of adoption of the business decisions.

Information should be linked to the future because the decisions adopted today, along with current effects substantially influence the business performance in the upcoming years. This approach means that the information about the past are irrelevant for the adoption of the decision, but the information from the past are inessential in the process of building the decision about the future and in particular in the process of adoption of business long term decisions.

II. LITERATURE REVIEW

Rich literature exists on the field of Managerial Accounting mainly as textbooks and as empirical researches from business practices. The theoretical base of the paper and specifically the importance of Managerial Accounting and the role of Relevant Information is based on textbooks of following authors: Hilton and Platt (2011)& Zimmerman (2000)& Horneegren, *et al*, (2005)& Smith, *et al*, 2006& Drury (2005). A highly competent research about the role on the Managerial Accounting in the business entities in Indonesia is published by Christina Wiwik Sunarni (2013).

Sunarni's paper is titled 'Management Accounting Practices and the Role of Management Accountant: Evidence from Manufacturing Companies throughout Yogyakarta, Indonesia'. The paper concluded that: the result of the analysis revealed that management accounting practices in Yogyakarta's manufacturing companies were dominated by traditional management accounting practices; however, the most important practices were different between medium and big-scale companies.

The second part of the conclusion is very important for this paper. The author rightly concluded: There is a need to work closely with the accounting education in preparing the students to be qualified management accountants in the future. Accounting curriculum should be developed consistently to the changing role of accountants. Accounting Education must equip students with capabilities in coping with the rapid changing of the business environment in order so they can always provide relevant management accounting information to managers. The paper of Ali Uyar (2010) titled 'Cost and Management Accounting Practices: A Survey of Manufacturing Companies analyses the cost and management accounting practices utilized by manufacturing companies in Istanbul, Turkey. The example of this study consists of 61 companies, containing small, medium-sized and large companies. For the purpose of this paper the following finding of the author were important: The findings indicate that companies perceive traditional management accounting tool as very important. However, new management accounting practices such as strategic planning and transfer pricing are perceived less important than traditional ones, therefore, they need to improve themselves in this aspect.

Only two papers have researched the impact of Managerial Accounting on the businesses of different economies of West Balkans (Breuer, *et al*, (2013)& Lale, *et al*, (2014). Breuer in general is focused on the role of Managerial Accounting on the decision making process without analyzing specific methods and tools of Management Accounting. Breuer's paper titled "The role of management in the decision making process: Case study analyzes the implementation of Managerial Accounting in the survey of 50 economic entities in the region of Caraş Severin County (Romania). The paper concluded that economic entities of this region partly implemented the tools of Managerial Accounting.

The study of Lale is focused on the role of management as a user of accounting information in the decision making process in companies of Serbia. Lale's paper titled "Validity of Accounting Information for management in the process of decision making "analyses the implementation of breakeven point based on the contribution margin in the process of measurement of the performance of companies. The study concluded that domestic companies failed to apply modern accounting system and the concepts and tools of cost management, which are used in developed countries. There is no empirical research about the impact of the tools of Managerial Accounting in decision making process in the companies of Macedonia, so this paper will be the pioneer paper in this filed. The paper will provide some recommendations for advancing the implementation of concepts and techniques of Managerial Accounting and in particular the tool of Relevant Information.

III. RESEARCH METHODOLOGY

In order to meet the objectives of the paper, that is the level and the quality of implementation of the concept of Relevant Information as a tool in decision making process the on-line survey of 70 companies from the Polog region was conducted. The Polog region contains of two main regions of Tetovo and Gostivar in Republic of Macedonia. The companies belong to three main sectors: trade, services and manufacturing. During the process of choosing the companies the author took in consideration relevant information of companies like:

the type of activity, the number of employees, the number of professional staff, the value of assets, the value of equity, the value of liabilities, the value of revenues etc.

The content of the survey was previously discussed and approved with the managers and accountants-financiers of the companies. The questionnaire includes 15 questions which can be rearranged into four groups. The first group of questions sets out general issues regarding accounting information system and implementation of the Managerial Accounting in the company.

The second group of questions sets out the issue of professional staff and implementation of ethical principles and Managerial Accounting. The third group of questions that is the essence of the research sets out eight business situations that receive response through implementation of the techniques of relevant information as an important instrument of Managerial Accounting.

The fourth group of questions sets out the issue of cooperation of companies with government and research and education institutions as prerequisite of improving business environment and recruiting the professional staff based on merit criteria. The respondents need to state their opinions in five components of the questionnaire: strongly disagree, disagree, don't now, agree, and strongly agree.

The managers of the companies offered full cooperation, 54 responses were received from all companies that means the survey was realized successfully at level of 80%. By using common statistical and descriptive methods we provide proper empirical and comparative statistical data of the position of companies in Polog region and in Republic of Macedonia.

IV. THE RELEVANT INFORMATION'S (QUALITATIVE FACTORS DESPITE QUANTITATIVE FACTORS)

Hilton and Platt (2011) stated that Management Accounting is the process of identifying, measuring, analyzing, interpreting and communicating information in pursuit of organization's goals. Management accounting is an integral part of management process. The primary purpose of management accounting in the organization is to support management of the companies to realize the business goals, particularly offering the techniques of relevant information (Osmani 2011).

Management accountings practices have to assure that information provided to managers are relevant and useful in doing their jobs and realizing the business goals (Sunarny 2013).

Quantitative factors are those factors that can be measured in monetary terms. When a production line will be interrupted, as a result of this, the company will reduce costs of direct materials, reduce the labour costs and reduce the indirect costs related to the production line. This reduction in costs is due to the termination of the production lines, a factor that can be measured, quantified and expressed financially. Qualitative factors are those factors that cannot be measured in financial terms to a significant extent and which have a considerable impact on the business decision-making process at short and long term (Hornegren, et al, 2005).

If the company considers the possibility of transferring a plant from a big city to a small city in periphery, qualitative factors such as the impact on the morale of the employers that has to be transferred, the business environment, the fiscal policies of new local government, the loss of jobs in the local economy, the reaction of the trade unions and other factors can be decisive in the approval or cancellation of business decision.

Even the fact that factors of this nature are very difficult to be assessed in monetary terms, they have considerable impact in decision making process to develop or interrupt the business. These factors become very important in particular in situations of economic, political and social conjunctures that have been the distinguishing features of transition economies and in particular the economies of the Western Balkans where the Polog region belongs as part of Republic of Macedonia.

It is worth mentioning that in the countries of the Western Balkans the qualitative factors in the past produced asymmetric risks in spheres of politics, economy and social sphere and had a decisive impact in relation to quantitative factors in decision-making process.

Managers and decision-making bodies of companies that were not able to understand the importance of the negative impact of qualitative factors have faced many difficulties and have paid high economic and social price. These difficulties were of the economic and political nature and in many cases were the main causes for the bankruptcy of many large and medium companies during the period of economic transition and in the case of Macedonia and in the Polog region in particular.

V. THE TYPES OF BUSINESS DECISION-MAKING PROCESSES BASED ON RELEVANT INFORMATION

Effective decision-making process means: defining the problem, identifying potential alternatives, gathering information for each alternative under discussion, eliminating irrelevant information and focusing on relevant information in the decision process. The types of situations for decision making process within the concept of relevance mainly addressed changes coming from the market. Based on Drury (2005) the most

characteristic situations resolved by the concept of Relevant Information and which is the subject of this study are:

1. Acceptance or rejection of special orders,
2. Termination or extension of production lines,
3. Maximizing the profitability analysis of the sales mix,
4. Produce or purchase direct materials,
5. Analysis of the costs of inventories of materials,
6. Analysis of changes of business partners, and
7. Replacement of existing equipment with new equipment.

Despite the fact that the above mentioned situations have big diversity, the managers of companies resolve them by respecting the basic criteria of relevant information and taking into account the costs that can be avoided and the revenues that can be earned. If we will rationalize the short term decision process within the concept of relevance in the business equation we will have two main variables: the additional revenues and additional costs.

If additional revenues are higher than additional costs in that case the decision is positive and vice versa, if the additional costs are higher the decision is not approved. The situations mentioned above are resolved by approving decisions based on quantitative factors, but when we take into consideration the qualitative factors decision may be changed despite the fact that the quantitative factors is in favour of adoption of the decision. This change takes in consideration the negative consequences for the performance of the company in long term.

VI. SOME IMPORTANT SOCIO-ECONOMIC CHARACTERISTICS OF REPUBLIC OF MACEDONIA AND POLOG REGION

Despite the fact that the Republic of Macedonia is ranked among the underdeveloped countries in the Western Balkans, the Polog region is undeveloped region within Macedonia. Socio-economic parameters presented in Table no.1 argue that the Polog region is in very bad position compared with the average of the national economy of Macedonia.

Table 1: Some relevant socio-economic data for Polog region and Macedonia (2014) (Author's own calculation)

Description	Inhabitants	GDP-per Capita	Average net wage per employee	Active population	Number of employees	Number of un-employed	Number of companies	New companies	Closed companies
Polog region	318,995	118.672	20.256	70.954	35.543	35.411	7.554	921	855
(%)	(15.7%)	(49%)	(78%)	(8.3%)	(5.9%)	(11.5%)	(10.8%)	(12.9%)	(8.5%)
Republic of Macedonia	2,027.697	243.161	25.900	856.597	602.343	308.376	70.139	7161	9,993
Total (100%)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)

GDP per capita in the Polog region is only 49% of the average of Macedonia, active population participates with 8.3% even that the total population participates with 15.7%, the number of unemployed (11.5%) is twice higher in relation to the number of employees (5.9%) etc.

The fragile business environment at the level of the national economy has produced the growing trend of over 10% of companies that closed (failed) activities and new companies that are registered as new businesses despite the fact that Macedonia is counted among the WB countries with lowest rates of fiscal burden of only 10%. The data presented in Table no.2 reflects the asymmetrical situation of the Polog region in comparison with socio-economic situation of Republic of Macedonia.

Table 2: Some relevant economic data for Polog region and Macedonia (2014) (Author's own calculation)

Number of active business entities by number of employees	Republic of Macedonia	Polog Region	Surveyed companies (54)	Service companies	Trading companies	Manufacturing companies
0	7,329	355	0	0	0	0
1-9	56.261	6.756	34	13	14	12
10-19	3.032	209	16	4	4	4

20-50	1.947	138	6	0	0	3
50+	1.570	96	0	0	0	0
(Total)	70.139	7.554	54	17	18	19
Total (100%)	(100%)	(10.8%)	(100%)	(31.5%)	(33.5%)	(35.0%)

The information presented in Table no.2 argues that active companies in the Polog region are only 10.8% of the total of companies at the national economy, 90% of companies are micro companies and employ (1-9 employees) and middle companies are only 1.3% and employ over 50 employees.

The survey of the 36 companies (64%) are micro and employ 1-9 employees, while the rest of 18 companies employ 10-20 employees and are treated as small companies. In terms of the type of activity, 31.5% of companies are dealing in sector of services, 33.5% are commercial companies and 35% are dealing in manufacturing sector.

The fact that over 90% of companies are micro companies reflects the fragile structure of the economy of Polog region as one of the most underdeveloped regions with less profitable economic structure and weak employment potential. The small number of the employed, the lower economic performance of companies associated with the lack of professional staff as a result of insufficient establishment of accounting information system has produced partial implementation of the principles of Management Accounting and the tolls of Relevant Information in process of adopting decisions in the Polog region.

VII. RESEARCH FINDINGS

Based on (Hornegren, *et al*, 2005) efficient decision making process means respecting the following steps: define the problem, identify potential alternatives, gathering information for each alternative under discussion, eliminating irrelevant information and focusing on relevant information for decision making process.

Despite the fact that all steps mentioned above are relevant, special importance is related with eliminating the irrelevant information and focus on relevant information in the decision process.

Through this approach we rationalize the decision-making process and avoid numerous errors in the decision-making process as a result of asymmetric and unpredictable impacts from markets. In order to reach the objective of the research, 70 companies were surveyed in the Polog region. The survey included 15 questions well systematized, 54 companies online responded positively to the survey.

The survey results reflect an asymmetrical level of knowledge and implementation of the tool of relevant information on the case of companies in the Polog region.

Obtained answers are consistent with the fact that in accordance with the Corporate Law of Macedonia (2015), criteria of ranking the companies are: number of employees and annual turnover. From analyzed companies 90% of them belong to micro and small companies and only 10% are medium-sized companies.

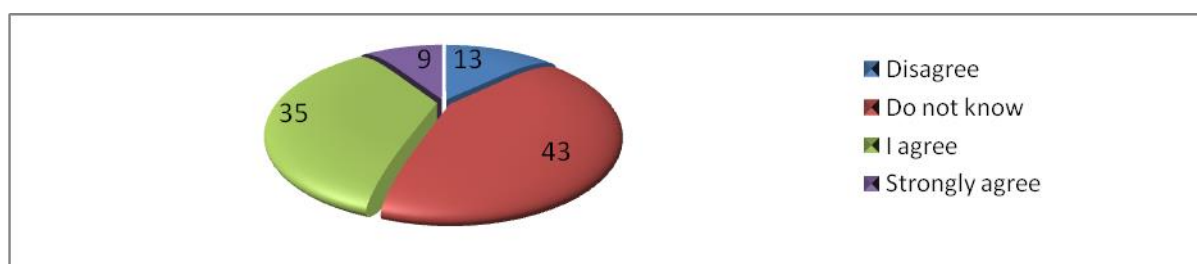


Chart1.Respondents' opinions about the quality of the human resources to create, analyze and provide important information from accounting in decision-making process (In %).

(Created by author based on results of the survey)

Lack of professional human resources is a deficiency noted in particular at the manufacturing companies and partly it is also present at service and trading companies. The fact that more than 60% of managers surveyed do not distinguish the Financial Accounting from Management Accounting as an information system is due to the fact that over 90% of firms do not have employed the professional staff within the company.

Most of the companies surveyed are micro and small and have employed a symbolic number of professional staff in accounting and finance or mainly use contractual professional assistance in accounting and finance. The evidence of accounting of these companies is addressed primarily to Financial Accounting as a legal obligation and very limited in Managerial Accounting as information system which is in function of business decision making process.

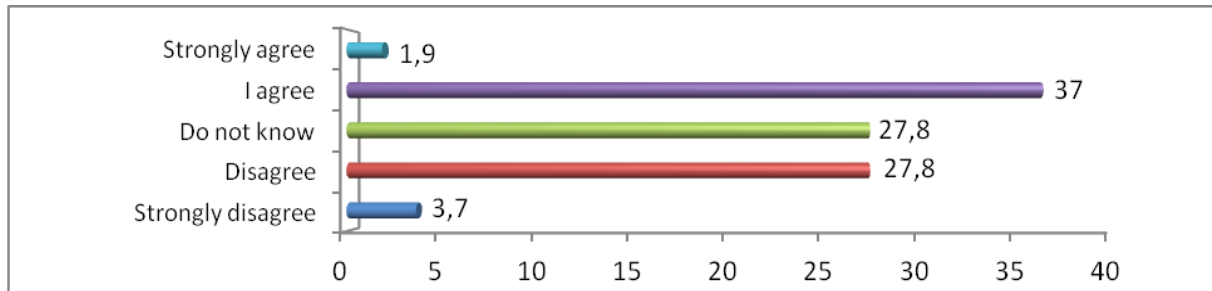


Chart 2. Respondents' opinions about the constitution of the information system that makes the difference between Financial Accounting and Managerial Accounting in order to manage successfully the businesses. (In %)

(Created by author based on results of the survey)

This situation is also due to the fact that Republic of Macedonia have very high level of informal economy, a fact that creates numerous distortions of the market and other natures and imposes maintaining of two parallel systems of accounting information (formal and informal) (Osmani, 2015).

The response to this question is fully coherent with the response to the previous question. The companies that do not have qualitative staff of accounting and finance and which do not distinguish Financial Accounting from Managerial Accounting as separate information systems cannot recognize and apply the key techniques of Accounting Managerial at significant levels.

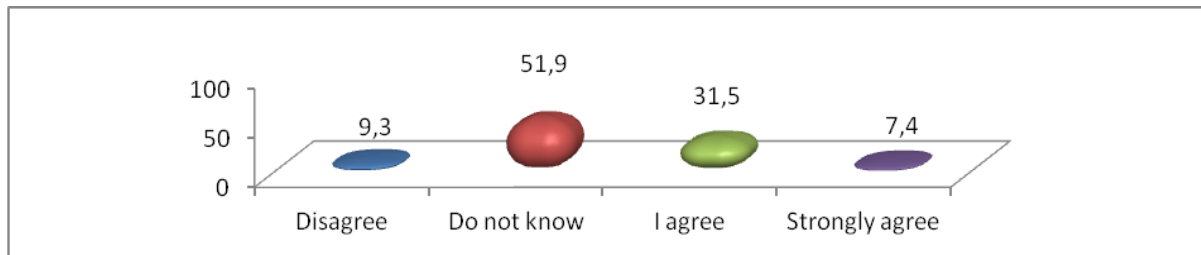


Chart 3. Respondents' opinions on the level of application of major managerial accounting techniques in the process of decision making (In %). (Created by author based on results of the survey)

It is worth mentioning that positive responses to the following questions of this survey regarding the implementation of some key tools of Relevant Information at manufacturing and service companies are the consequence of managerial experience rather than theoretical knowledge and qualitative implementation of these management practices. In 1983, the National Association of Accountants (NAA) in the US published standards for ethical behaviour of Management Accountants (NAA, 1983). These standards are divided in four categories:

1. Standards of competence,
2. Standards of reliability,
3. Standards of integrity, and
4. Standards of objectivity.

Positive attitude of managers surveyed on business ethics at the level of 67% verifies the fact that in countries like Macedonia, where the legal economic system faces negative interference of government, respecting the ethical code in relation to employees and to business partners and consummators is a necessary condition to survive and develop the business.

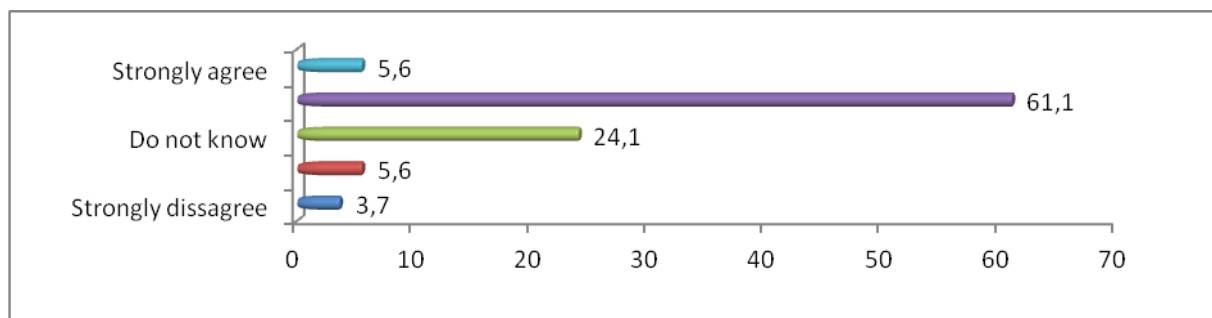


Chart 4. Respondents' opinions on the implementation of the Ethical Standards of Managerial Accounting in the process of management of businesses (In %).

(Created by author based on results of the survey)

By respecting the Ethical Standards of Managerial Accounting companies would benefit in the decision-making process and will increase the capacity in combating negative phenomena that are the distinguishing characteristic of economic transition in countries of Western Balkans.

In transition countries such as Macedonia the implementation of ethical standards of accounting has a particular importance. As result of the prolonged process of political and economic transition and the deep economic and social crisis, ethical principles are not respected to a great extend in the financial reporting of business activity of public and private sector. As a result of these deviations, financial reports are considerably subjective and do not reflect really the real economic activity of the businesses within the national economy.

Despite the fact that business situations have a high diversity; the management makes decisions by respecting the basic criteria (variables) of relevant information: additional revenue and additional costs. If additional revenues are higher than additional costs in that case the decision is positive and vice versa, if the additional costs are higher business decision is rejected.

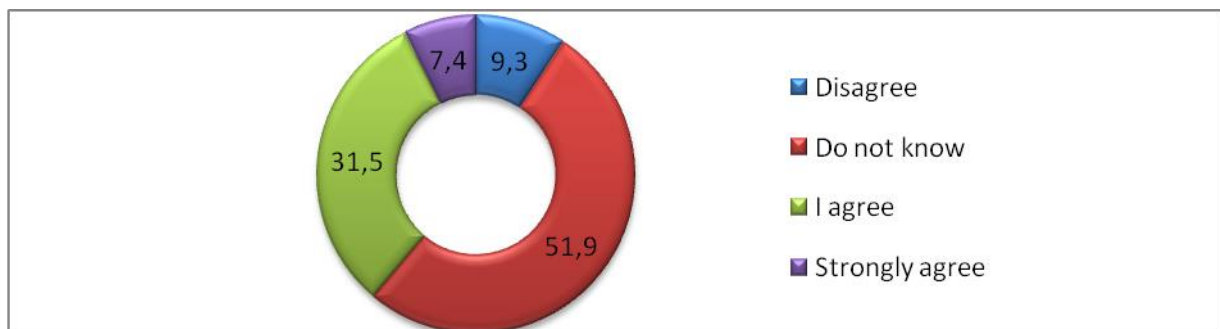


Chart 5. Respondent's opinions on the application of the concept of Relevant Information in the decision making process (In %).

(Created by author based on results of the survey)

Almost symmetrical responds (55% against and 45% in favour) in terms of non-compliance (implementation) of the concept of relevant information as managerial tool of decision making process argues the confusion that exists in most of the surveyed businesses in Polog region.

Positive responds in this case are addressed to professional staff that have followed the studies at Economic Faculty at SEEU–Tetovo in the last decade and are currently engaged as professional staff of accounting and finance in the analyzed companies.

In cases when the company is working with partial capacity, the management of the company can be presented the opportunity to accept or reject special orders with special price. If the price of the order is above normal or higher, the management of the company with certainty will decide to accept special order, because the order will increase the activity and the profit of the company.

But if the price offered for the special order would be lower than the normal price in that case the approval of the decision will require additional analysis and arguments (Osmani, 2011). In principle, special orders are not applied to the regular customers, these orders have much lower prices from standard prices and they are applied in situations when the company operates above the breakeven point and have already covered the fix costs. The dilemmas presented in the cases of special orders based on quantitative factors are solved based on financial statements composed by method of Contribution Margin. The division of the costs in fixed costs and variable costs at financial statements by the method of Contribution Margin is important because the fixed costs are irrelevant.

In this instance, despite the additional activities of the company they do not change, and therefore they are not taken into account during analysis of the special offer. In situations when the revenues from the additional activity will be bigger than additional costs (mainly variable costs) special offers will be accepted.

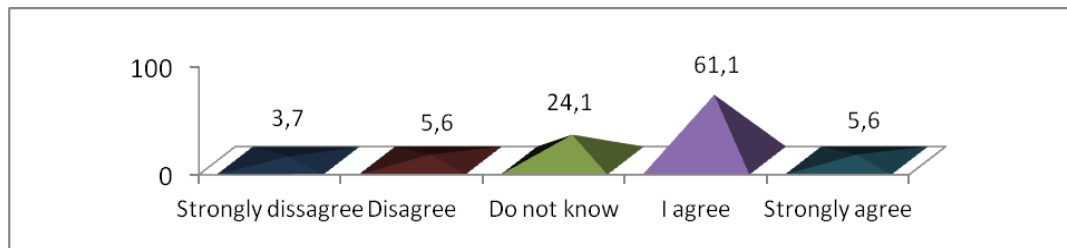


Chart 6. Respondent's opinions on the application of the concept, acceptance or rejection of special orders, in certain business situations. (In%)
(Created by author based on results of the survey)

Over 70% negative responds on the recognition and enforcement of the concept, acceptance or rejection of orders, in special situations, presented in the Chart no.6 argue the low level of knowledge and implementation of this managerial tool that brings special benefits but also carries many risks in terms of loss of core activities of business and lead to the loss of the major partners of the company.

Companies surveyed certify the implementation of this concept in cases when the company has big difficulties in fulfilment of the financial and fiscal expired liabilities and maintaining the liquidity of the company. In the cases when the regular buyers obtain information about the Special Order, they condition the future cooperation with the price reduction on the price level of special order. In that case the special order has to be rejected, because it puts in doubt the realization of the long-term objectives of the company (Osmani, 2007).

Positive Responds in over 55% of surveyed companies argue that managers of companies in the Polog region carefully follow the contribution of each production line in the framework of the overall analysis of the profitability of the company. Most of these companies prepare the Statement of Revenue by Contribution Margin for each product in order to determine the individual contribution of each product in the company's profit.

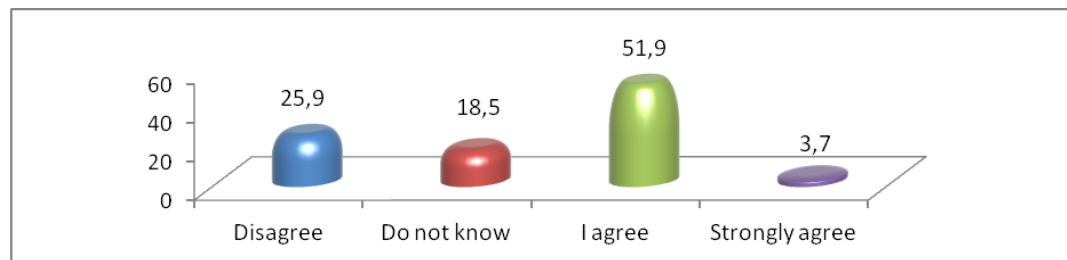


Chart 7. Respondent's opinions on the application of the concept, termination or continuation of production lines in the context of maximizing the profit by analyzing the sales mix (In %).
(Created by author based on results of the survey)

These analytical reports serve to managements to make decisions favouring products that contribute to company profits, respectively, to terminate the unprofitable production lines. The orientation of production towards profitable lines is dependent primarily by market demand for these products and from free technical, human and financial capacity of the company.

In certain cases it is more economical to produce direct materials by the company, because there will be no delays in deliveries of materials and above all the quality of materials will be conform the standards of quality proclaimed by the company. Analysis of the decision to produce or purchase the materials is determined by analyzing the relevant costs of materials and supply costs of materials by the relevant partners outside the company.

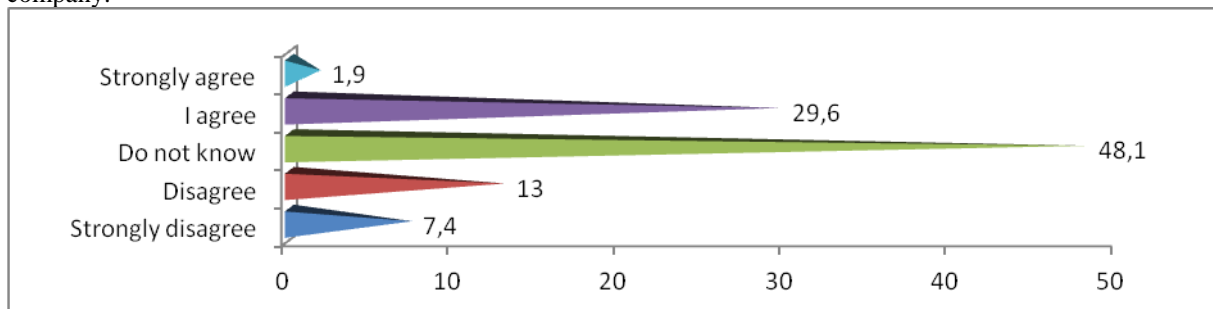


Chart 8. Respondent's opinions on the application of the concept, production or purchase of direct materials in certain business situations (In %).
(Created by author based on results of the survey)

Negative response of over 70% in the case of question no.8 presented in the Chart no.8 argue the partially low level of managerial knowledge in terms of the opportunity cost of materials at companies of Polog region. This result is the consequence of the fact that within the 54 analyzed companies only 10% of companies belong to the manufacturing sector, while 90% belong to the service and trade sector, who are not faced often with this dilemma. Most companies in the implementation of budgetary projections are faced with the dilemma: to supply at the beginning of the budgetary period the projected amount of raw materials, direct materials and spare parts or to supply successively during the realization of production.

Supplies at the beginning of the budgetary period usually perform in cases when company produces for the well known buyers in advance and when the company has free financial assets. Analysis of the supply costs of inventories at the beginning of the budgetary period or during the fiscal year based on the concept of relevant information analyzes the opportunity cost that faced by company.

The opportunity cost in this case is the result of the fact that free financial assets are not invested in alternative projects which can bring additional economic benefits for the company despite the fact that assets invested in inventories of materials do not bring economic benefit for the company.

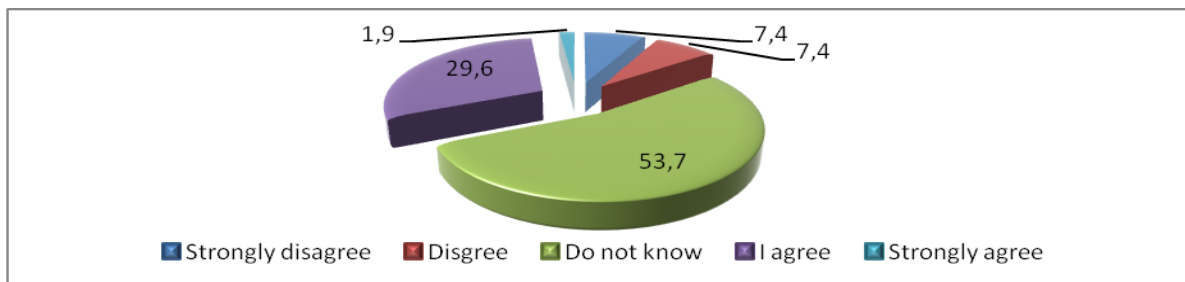


Chart 9.Respondent's opinions on the application of the concept, Analysis of inventories of costs of materials, in certain business situations (In %).
(Created by author based on results of the survey)

The answers given to question no.9 presented in the Chart no.9 is fully coherent with the response to question no.8 by which is verified that the low level of managerial knowledge in terms of opportunity cost is addressed in similar levels to all the companies despite the sector of activities. During the economic activity most companies face numerous problems of their cooperation with business partners.

These problems are mainly identified as the violation of contractual terms of payment of liabilities, remarks about the quality of goods, inadequate servicing and inadequate guarantees, lack of spare parts and similar problems. The above business problems are addressed within the qualitative factors and most companies make permanent analysis in terms of replacing existing partners with new partners, taking into account the quantitative factors in terms of covering the fixed costs and generally they replace the old partners with new business partner.

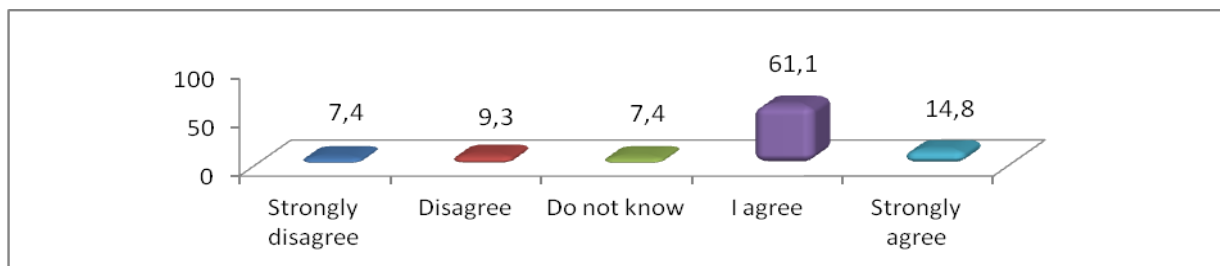


Chart 10.Respondent's opinions on the application of the concept,, Analysis of the alternative of changing the business partners,, in certain business situations (In%).
(Created by author based on results of the survey)

The positive Responds in over 75% of surveyed firms, presented in the Chart no.10 argue that managers of companies in the Polog region respect the contractual obligations in the business, and in the problematic cases managers undertake actions of replacement of non serious partners with new partners. Very positive response of over 82% of the respondents in the case of question No.11 argue the high level of awareness of the businessmen of the Polog region about the importance of the technological progress and the respecting the opportunity cost in the process of realizing the new investments in long-term assets. A decision of this kind also depends on the readiness of the banking sector to assist financially the business sector, a sector that has low liquidity and faces difficulties to overcome additional costs as a consequence of debt financing of new investments in long-term assets.

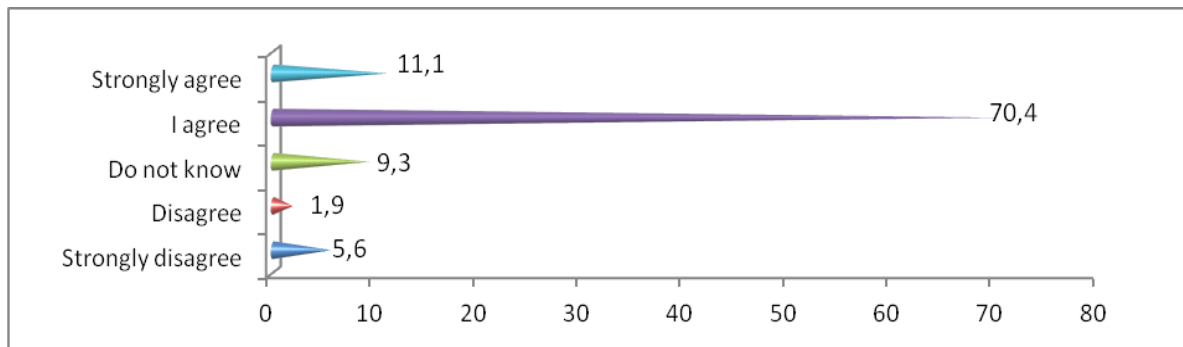


Chart 11. Respondent's opinions on the application of the concept, replacement of existing equipment with new equipment,, in certain business situations (In%).

(Created by author based on results of the survey)

Positive responses at the level of 85% to question No.12 presented in the Chart no.12, despite low recognition of the concept of relevant information argue the high awareness and business ethics in terms of holding fair relations with partners and customers as pre- condition for developing businesses in regions that permanently face many asymmetric shocks.

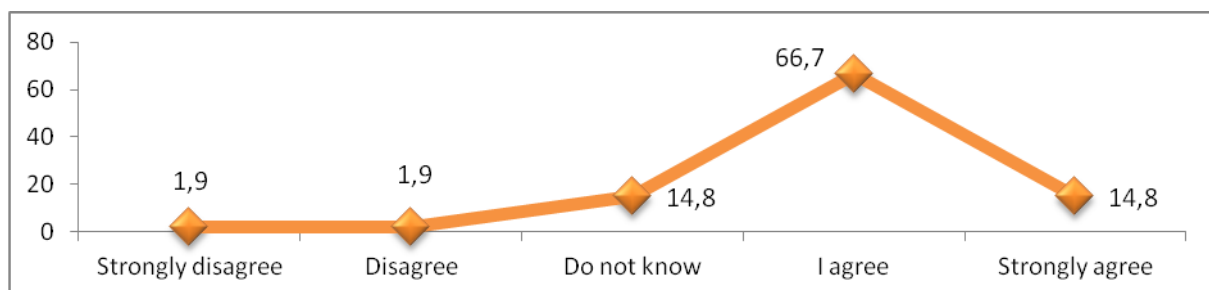


Chart12. Respondent's opinions about the impact of implementation of the concept of Relevant Information in terms of maintaining correct relations with regular partners and consumers of the company (In %). (Created by author based on results of the survey)

This finding was mainly addressed to business situations identified, with special orders, and „ alternative for replacement of commercial partners,, when the businesses are confronted with financial difficulties. Positive responses (80%) to question no.13. by businessmen of Polog region are the result of acceptance of the theoretical arguments presented by the author of this research.

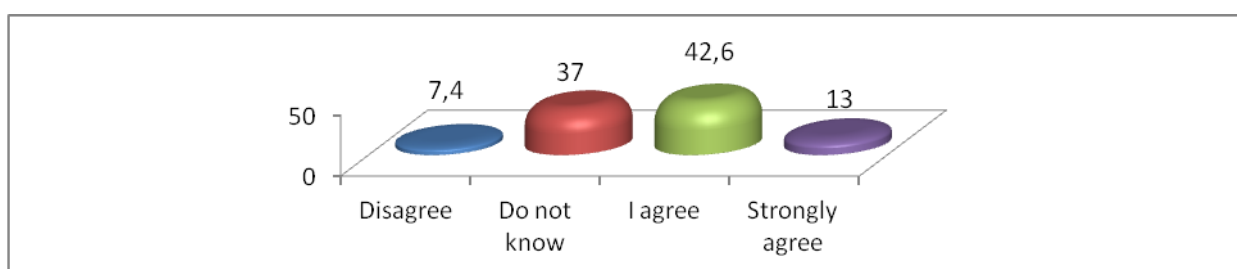


Chart13. Respondent's opinions about the impact of implementation of the concept of Relevant Information in short-term growth (reduction) of sales, increase (decrease) profit and increase (decrease) the competitiveness of the company (In%). (Created by author based on results of the survey)

The author of this paper organized several training sessions with representatives of companies interviewed in this survey explaining the importance of practical implementation of the concept of the relevant information and the positive impact of this concept in increasing the performance of companies. Macedonia is a unique case in the Western Balkans where the business environment is characterized as “advanced formally” measured by indicator based of the World Bank “Doing Business” but associated with a lower level of investment in general and in particular the very low level of FDI within the Western Balkan countries.

A paradox of this nature is analyzed by the author of this research in the paper, “Improved Business Climate and FDI in the Western Balkans” (Osmani, 2014).

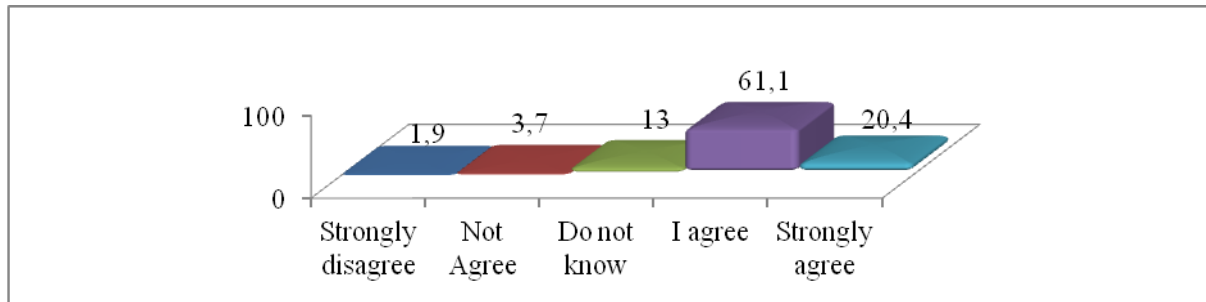


Chart 14. Respondent's opinions about the impact of insufficient implementation of Management accounting techniques as a consequence of unfavourable business environment and low business culture in Macedonia and in particular in the Polog region (In %). (Created by author based on results of the survey)

Very positive response (82%) in question no.14 presented in the Chart no.14 is fully coherent with the preliminary responses and demonstrates the real concern of businessmen in Polog region in terms of business climate and culture of payment in sense of fulfilling financial obligations between businesses and in particular the obligations of the government to the businesses sector.

Inadequate cooperation between the business sectors, central and local authorities and institutions of higher education in economic sciences have a negative impact on staffing the businesses with professional staff and produce no impact on economic policies of government in terms of improving the business environment.

A particular problem of Polog region and of the Republic of Macedonia is the vast informal sector and huge tax evasion that effectuates disorder of the market and disables equal competition between businesses, which is a result of wide institutional corruption and poor structural reforms implemented in the public institutions in this country (Osmani, 2015).

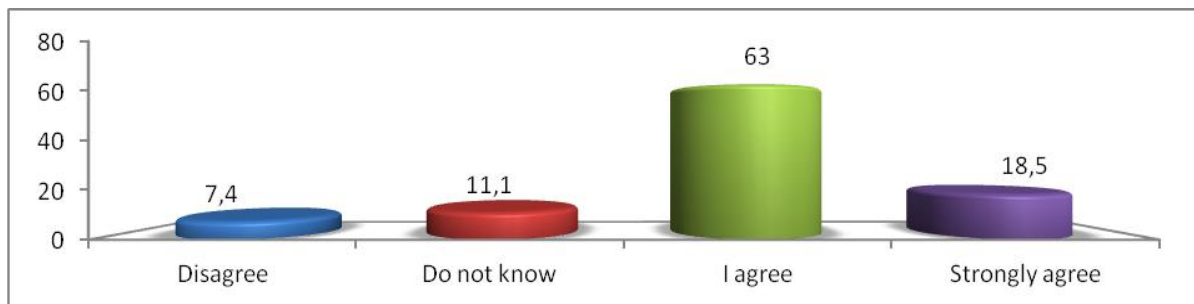


Chart 15. Respondent's opinions about the idea of cooperation with the chamber of commerce and institutions of higher education in economic sciences with the support of local and central authorities will improves the business environment and increase human capacities in implementing the tolls of Managerial Accounting and increase the performance of businesses (In %). (Created by author based on results of the survey)

Very positively responds of businessmen surveyed in question No.15, presented in the Chart no.15 in terms of creating a new cooperative relationship between businesses, government and institutions of economic knowledge is seen as a necessary prerequisite to reinforce human resources at businesses that will implement advanced tools of Managerial Accounting that will affect the growth of businesses performance.

VIII. CONCLUSIONS

The purpose of this study was to analyze the level and the quality of implementation of Relevant Information as a crucial tool of Managerial Accounting in selected companies (54) of Polog region (Republic of Macedonia). The survey was conducted in companies that belong to three main sectors: services, trade and manufacturing.

The majority of companies (90%) are ranked in micro and small companies while the rest (10%) are medium-sized companies. The result findings were in similar lines with research papers mentioned in this paper with the difference that the specific purpose of this paper was the Relevant Information and not the role of Managerial Accounting in general.

The study found following results:

-Most of the companies surveyed have not constituted Managerial Accounting as part of the information system as an important tool of business decision,

- Weak performance of companies has prevented the employment of professional staff as a pre-condition of implementing the tools of relevant information,
- The analyzed companies partly recognize the opportunity cost and the principles of additional costs and additional revenues as the main variables of relevant information,
- Partial implementation of the relevant information is the result of managerial experience and very little of theoretical knowledge of the managerial staff of companies,
- The analyzed companies manifest commitment to implement ethical principles in relation to the employees, business partners and customers,
- The analyzed companies reflect the partial knowledge regarding the business situations identified as: acceptance or rejection of special orders, produce or purchase direct materials, analysis of the costs of inventories of materials,
- The analyzed companies reflect the advanced knowledge regarding the business situations identified as: termination or extension of production lines, maximizing the profitability analysis of the sales mix, analysis of changes of business partners and replacement of existing equipment with new equipment,
- The analyzed companies manifest willingness for deep cooperation with research and higher education institutions and to recruit and employ the best students to overcome the lack of professional staff as a pre-condition of implementation of the advanced tools of Managerial Accounting in perspective,
- The analyzed companies manifest dedication to intensive cooperation with the economic chamber of Polog region and government authorities with objective of improvement of business environment and combating the informal economy as pre-requisites for improving the business environment.

The study has own limitations. Hence for next studies is suggested to:

- Increase the number of observations to companies by sectors and by level of companies (middle and big companies and using more advanced methodology,
- Extend the survey time period, and
- Making multidisciplinary teams within SEEU- Tetovo and from other institutions including business representatives with the aim of giving the relevant support to the businesses from the academy.

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